2006

The Cherry Valley Case: How Wrong Can Economists Be About Salvage?

Michael B.W. Sinclair
New York Law School, michael.sinclair@nyls.edu

The CHERRY VALLEY Case: How Wrong Can Economists Be About Salvage?

M.B.W. Sinclair*

> Salvage is the compensation allowed to persons by whose assistance a ship or her cargo has been saved, in whole or in part, from impending peril on the sea, or in recovering such property from actual loss, as in cases of shipwreck, derelict, or recapture. Success is essential to the claim; as if the property is not saved, or if it perish, or in case of capture if it is not retaken, no compensation can be allowed.[1]

"'Twas a dark and very stormy night, November 14-15, 1994, and the situation looked bleak for the barge Poseidon. Caught in the clutches of Tropical Storm Gordon, Poseidon and her escort, the J.A. Orgeron, were without power and adrift."[2] Judge E. Grady Jolly of the United States Court of Appeals for the Fifth Circuit began his opinion with style and drama to set the scene for a heroic rescue.[3] "Although under no obligation to assist, Cherry Valley's master, the suitably named Captain Strong, immediately altered course to rendezvous with the tug.[4] ... Captain Strong displayed exemplary seamanship throughout this incident."[5] It is as well to play up the drama, the heroism, and the skill of the plaintiff when you are about to reduce the district court's salvage award by over two million dollars.[6]

---

* Professor, New York Law School.

1. The Blackwall, 77 U.S. (10 Wall.) 1, 12 (1870).

2. Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 980, 1998 AMC 2382, 2384 (5th Cir. 1998).

3. *Id.* at 979, 1998 AMC at 2384.

4. *Id.* at 981, 1998 AMC at 2386.

5. *Id.* at 981 n.4, 1998 AMC at 2386 n.4.

6. Judge Stanwood Duval of the United States District Court for the Eastern District of Louisiana had awarded the CHERRY VALLEY's owners, captain, and crew $6,406,440 for the rescue of the tug J.A. ORGERON, its tow, the barge POSEIDON, and the latter's cargo, an external fuel cell for the booster rocket that launches NASA's space shuttles; the Fifth Circuit

Judge Jolly's revision of the award to the salvors resulted from a revision of the value assigned to the rescued cargo, "ET-70" (for "external fuel tank number 70"), an external fuel cell for the booster rocket that launches NASA's space shuttles.[7] The opinion relies heavily on the economic theory of salvage propounded by Professor William M. Landes and then-professor, now ex-Chief-Judge Richard A. Posner of the United States Court of Appeals for the Seventh Circuit.[8] I shall use the example of Captain Strong and his ship, the CHERRY VALLEY, to argue that this theory is misguided because it fails to consider the culture and motivation of those whose behavior it purports to explain. Perhaps this is the law and economics movement's characteristic failing.

Part I is an account of the rescue that led to the litigation and appeal in *Margate Shipping v. M/V J.A. Orgeron.* Part II is a brief history and outline of the law of salvage. Part III is a brief summary of Landes and Posner's theory of salvage. Part IV recounts and evaluates that theory's application in *Margate Shipping.* Part V concludes with the argument that the facts of the CHERRY VALLEY's heroic rescue of the tug J.A. ORGERON and its tow, the barge POSEIDON with its valuable cargo, show the empirical incongruity of Landes and Posner's model, as used by Judge Jolly in *Margate Shipping.*

I. FACTS

> "The prototypical act [of salvage] is rescuing a ship in peril at sea and towing her to a place of safety."[9]

On November 10, 1994, the tug J.A. ORGERON,[10] under the experienced command of Captain Lanny Wiles,[11] departed Michoud, on

---

reduced that award to $4,125,000: "We reduce Margate's salvage award from $6,406,440 to $4,125,000 and direct that judgment be entered in that amount." *Margate Shipping*, 143 F.3d at 995, 1998 AMC at 2408.

7. ET-70, was "to be used a few months later to launch the shuttle *Atlantis* into space on NASA's 100th manned space mission" and first docking with the Russian space station, *Mir.* SKIP STRONG & TWAIN BRADEN, IN PERIL: A DARING DECISION, A CAPTAIN'S RESOLVE, AND THE SALVAGE THAT MADE HISTORY 17 (2003).

8. William M. Landes & Richard A. Posner, *Salvors, Finders, Good Samaritans, and Other Rescuers: An Economic Analysis of Law and Altruism*, 7 J. LEG. STUD. 83, 85-86 (1978).

9. GRANT GILMORE & CHARLES L. BLACK, JR., THE LAW OF ADMIRALTY 536 (2d ed. 1975).

10. The J.A. ORGERON was "an ocean-going tug being operated by Montco Offshore, Inc., under contract for NASA." *Margate Shipping*, 143 F.3d at 980, 1998 AMC at 2384. It was 114 feet long and had "eight-cylinder main engines, a pair of Polar Nohab diesels, which were each capable of 1,750 horsepower, and burned fuel at the rate of about 2,500 gallons per day." STRONG & BRADEN, *supra* note 7, at 21, 43.

11. STRONG & BRADEN, *supra* note 7, at 21.

"the Gulf Intracoastal Waterway several miles east of New Orleans,"[12] with the barge POSEIDON[13] in tow carrying as cargo the ET-70, an external fuel cell used in launching a space shuttle.[14] Its destination was Cape Canaveral, one thousand miles away, around the Florida Keys and north along Florida's east coast. Making 9.5 knots, the group was past Key West on November 13 when a storm brewing in the Caribbean Sea developed into Tropical Storm Gordon.[15]

Although not designated a hurricane, Tropical Storm Gordon was not to be taken lightly. On the east coast of Florida the storm generated sustained winds of forty knots with gusts to sixty knots, blinding rain squalls, and fifteen to twenty-five foot seas. The J.A. ORGERON and its tow were not Gordon's only victims. The freighter JEANO EXPRESS foundered in the storm on November 14, after its crew was whisked to safety by the heroic efforts of the Coast Guard.[16] Gunfire from the Navy cutter DECISIVE later sank its capsized hulk.[17] The Turkish-registered freighter FIRAT, waiting to dock at Fort Lauderdale, dragged its anchor and ran ashore on November 15th.[18] This freighter remained grounded until it was freed on November 27.[19] The tug SOUTHBEND was the only tug that NASA could persuade to set out from the Florida coast in the storm. On the afternoon of November 15, it unsuccessfully attempted to assist in the CHERRY VALLEY's rescue by establishing a tow line to the J.A. ORGERON.[20] As it headed for shelter at Fort Pierce to await better weather, the SOUTH BEND began taking on water.[21] The vessel issued a "Mayday," and was forced to run aground in order to save itself from sinking.[22]

---

12. *See id.* at 15.

13. The barge was "[a]n old World War II Navy barge . . . converted by NASA to deliver tanks on the end of a tug-boats wire." *Id.* at 18.

14.

> The external tank is the largest piece of the space shuttle. It is 154 feet long, [34] 27 feet 6 inches in diameter and weighs 157,000 lbs. It carries 526,000 gallons of hydrogen and oxygen, which are kept in separate sections. During a launch it acts as both backbone and fuel source for the shuttle and, when its 8½-minute job is done, it is jettisoned, breaking into small pieces that fall "in remote ocean locations," according to a NASA fact sheet.

Matthew P. Murphy, *A Near Miss for Vero Beach*, VERO BEACH MAG., Apr. 2002, at 32-34.

15. STRONG & BRADEN, *supra* note 7, at 43, 45.

16. *Id.* at 65-67.

17. *Id.* at 98.

18. *Id.* at 167-68.

19. *Id.*

20. *Id.* at 144.

21. *Id.* at 148-52.

22. *Id.*

Under the command of Captain Prentice Strong III,[23] a young downeaster generally known as "Skip," the tanker CHERRY VALLEY left Gretna, Louisiana, on November 10, 1994, with a cargo of 235,000 barrels of fuel oil—about 10 million gallons—bound for Jacksonville and Port Canaveral, Florida.[24] The CHERRY VALLEY was "a T-6 class tanker operated by Keystone Shipping Company, designed primarily to carry heavy fuel."[25] It was 688 feet long, drew 35 feet fully laden,[26] and had a deadweight of 44,000 tons.[27] Given the difference in their starting points, she was about a day behind the J.A. ORGERON. She rounded Key West on November 14 and headed into Tropical Storm Gordon: "On the evening of November 14, the wind was out of the northeast and gusting to 40 knots; 20-foot seas were spreading solid water across the tanker's deck."[28] The weather worsened as the ships headed north up the exposed east coast of Florida.[29]

Early in the voyage, the J.A. ORGERON's troubles with its steering gear resulted in the loss of the use of its starboard rudder.[30] As the weather deteriorated, Captain Wiles contemplated taking shelter in

---

23.

> Captain Prentice Strong III was a graduate of the Maine Maritime Academy, and had been going to sea for over ten years at the time of the events in this case. It is a substantial testament to his ability that he reached the pinnacle of his profession, master of a large ocean-going tanker, at the remarkably youthful age of thirty-two.

Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 981 n.4, 1998 AMC 2383, 2386 n.4 (5th Cir. 1998).

24. Prentice "Skip" Strong, "*Unlikely Salvage Vessel Recovers NASA Barge*," 114 OCEAN NAVIGATOR, May/June 2001, at 26, 28.

25. *See id.* at 26 ("She was built in San Diego in 1974 and is powered by a 12,000-hp steam turbine, a feature I would come to fully appreciate in the coming days.").

26. STRONG & BRADEN, *supra* note 7, at 9.

27. *Id.* at 8.

> The ship . . . is more than two football fields long and requires time and anticipation to maneuver. . . . Maneuvering a ship of this size is like driving on ice; you always need to prepare long in advance for what might be happening ahead of you. When the ship is fully loaded it takes us eight-and-a-half minutes and almost a mile to go from full ahead to dead in the water.

Id. "Cherry Valley was a 688-foot oil tanker owned by Margate with a crew of 25 and a value of $7.5 million. On November 15, the ship was fully laden with nine million gallons of heavy fuel oil and had a draft of about 35 feet." *Margate Shipping*, 143 F.3d at 981, 1998 AMC at 2386.

28. Murphy, *supra* note 14, at 20.

29. "Conditions worsened during the late evening of Nov. 14 and the early morning of Nov. 15, when we came out of the lee of the Bahamas Bank. The winds shifted and now came from the ENE at sustained speeds of 35 to 40 with gusts to 60 knots. The seas grew in intensity to between 15 and 20 feet." Prentice "Skip" Strong III, *Tanker Crew Performs Unlikely Salvage*, PROF. MARINER, Feb. & Mar. 2001, at 20; *see also* Strong, *supra* note 24, at 26.

30. *Margate Shipping*, 143 F.3d at 980, 1998 AMC at 2385.

Miami.[31] He radioed Lee Orgeron, chief executive officer of the tug's owner, who in turn called NASA. "'Continue on,' Orgeron relayed. 'They want you to keep going.'"[32] But late on the 14th, the J.A. ORGERON's troubles multiplied. First, the port engine failed, but was restarted despite the difficulty of repairs in such conditions.[33] Then, "[a]t 2000 [engineer Chris] Gisclair reported to Wiles that the starboard engine's No. 5 and 6 cylinders were no longer firing."[34] The situation got worse: the tug's port reduction gear failed, forcing the crew to shut down the port engine.[35] With only six out of eight cylinders functioning on the starboard engine, the J.A. ORGERON's crew was able to maintain a speed over the ground of "0 knots," i.e., just maintain position.[36] When the starboard engine further malfunctioned, overheating and catching fire in the exhaust stacks, "[t]he J.A. ORGERON and barge POSEIDON were now drifting downwind at a rate of 1.5 knots and were six miles to windward of Bethel Shoal, a spur of shallow water jutting from the shore near Fort Pierce, Florida."[37] At 0330 on the 15th, Captain Strong of the CHERRY VALLEY calculated that "[a]t their present rate of drift they would be over Bethel Shoal, which had depths as shallow as 28 feet, in less than 3 hours."[38]

The CHERRY VALLEY was the only vessel in the area, and help was not available from the shore.[39] The poor conditions prevented the Coast Guard at Fort Pierce from putting to sea.[40] Just after 0100 on November 15th, the CHERRY VALLEY received "a distress call over the VHF from a tug and tow requesting urgent assistance."[41] Captain Strong had a difficult but highly consequential decision. A tug with five men on board was in desperate straits. Maritime law requires mariners to provide any assistance possible to those in distress while on the water.[42] But what is possible? "This law is only binding to the point that you, your vessel

---

31. STRONG & BRADEN, *supra* note 7, at 49.

32. *See id.* at 50; *see also Margate Shipping*, 143 F.3d at 980, 1998 AMC at 2385 ("Permission was denied, as reflected by the following notation in Orgeron's Weather Log: 'Recommendation to put into Miami—NASA requested to continue on.'").

33. STRONG & BRADEN, *supra* note 7, at 77.

34. *Id.*

35. *Id.* at 82.

36. *Id.*

37. *Id.* at 83.

38. Strong, *supra* note 29, at 23; Murphy, *supra* note 14, at 20.

39. Strong, *supra* note 29, at 23.

40. "There were no other vessels in the area; the breaking waves at Fort Pierce Inlet, 20 miles to the tug's southwest, were too severe for the Coast Guard's motor life boats." Murphy, *supra* note 14, at 20.

41. Strong, *supra* note 29, at 20; *see also* STRONG & BRADEN, *supra* note 7, at 85.

42. STRONG & BRADEN, *supra* note 7, at 89.

and crew are put in danger. That's where the obligation ends. Given the conditions tonight, no one would fault us for passing by."[43]

Captain Strong was well aware of the risks:

> If we do try and help and something goes wrong, the CHERRY VALLEY could go aground and tear its bottom out on Bethel Shoal. Rescue or not, 10 million gallons of oil released a few miles upwind of some of Florida's busiest beaches will be a one-way ticket into the annals of maritime hell—in the best tradition of banished and shunned Exxon captain Joe Hazelwood.[44]

How did others assess the downside risk? Don Kurz, President of Keystone Shipping Co., at trial said that Margate (the Keystone subsidiary that actually owned and operated CHERRY VALLEY) and Keystone "collectively operated some 33 ships, ranging in size from 38,000 deadweight tons to 400,000 tons, and employed more than 1,000 personnel around the world."[45] Asked what the company had at risk in the rescue, he answered: "We put at risk our vessel, our crew, our company, our company assets, our reputation—our very existence."[46] Matthew Murphy of *Vero Beach Magazine* wrote, "A loaded tanker is not maneuverable even on calm days. In such horrific conditions, what could this one possibly do to rescue the disabled tug and its mysterious cargo?"[47] He asked Captain Strong's old maritime law professor, Emeritus Professor Wallace S. Reed of the Maine Maritime Academy:

> He would have destroyed a multi-ship U.S. company. He would have destroyed the shareholders. He would have gravely tarnished his ability to sail on his license. He would have found himself joining that small group of eco-demons in the world.... How could you put the vessel into that circumstance," Reed asks rhetorically, "where you thought you had ten feet under the keel? But heroes come out of such circumstances—where you put yourself against such odds. Those men on the tug could have died that night.[48]

But it wasn't so much law as culture that determined Captain Strong's decision. Professor Reed wrote of the tug boat's captain: "A seaman like Wiles had a near religious respect for one of the sea's accepted codes: a quid quo pro that obligated the offering of aid, if at all

---

43. *Id.*

44. *Id.* at 88. Note that the public denigration of Captain Hazelwood is not fully deserved, as Strong and Braden point out. *Id.*

45. *Id.* at 21.

46. *Id.*

47. Murphy, *supra* note 14, at 20-22. The barge's cargo was a mystery to Captain Strong; he had not given it a thought at this point. STRONG & BRADEN, *supra* note 7, at 140.

48. Murphy, *supra* note 14, at 32.

possible. It is a brotherhood of people at sea."[49] Of his own decision, Strong wrote:

> I know with certainty that if we snap a line or the ship goes aground and one of my crew gets hurt or we put oil in the water, my career is over. But, politics aside, I'd be unable to live with myself if I sailed by without at least trying to help.[50]

In addition, he added:

> Since the rescue I have often been asked, would you do it again? The answer is a qualified "yes." I would certainly respond to the distress call and look at the situation and decide if the risk were justified. I would like to think that if I were in ORGERON's position someone else would be willing to come and assist me.[51]

Once Captain Strong had made the decision to attempt to rescue the tug, its crew, and its tow, the CHERRY VALLEY still had to steam north for two to three hours to reach the drifting tug and barge.[52] The tanker did not reach the immediate proximity of the tug and barge until about 0440 on November 15th.[53] Imagine the difficulty of the situation. It was absolutely pitch dark; with the overcast there was not even starlight; the seas were running as high as twenty-five feet; the wind was blowing from the northeast at a sustained forty knots, gusting to sixty knots, putting the flotilla on a lee shore; dense, blinding rain squalls passed frequently; the distressed tug and barge drifted toward the lee shore and the shallow Bethel Shoal near which the laden tanker drawing thirty-five feet dared not venture.[54] Of course, the rescue vehicle is a tanker, never designed for towing, and not at all maneuverable.[55] Captain Strong set a firm boundary on the rescue attempt because he "was very concerned about [the] close proximity to Bethel Shoal and the 60-foot curve just to [the] west and decided that under no circumstances could [he] allow *Cherry Valley* to cross the line of 80° 10' west longitude."[56]

Captain Strong and the master of the tug, Captain Wiles, were in constant radio communication, although they had to switch channels to avoid the seemingly endless chatter and bureaucratic questions of the Coast Guard.[57] There were still decisions to be made.

---

49. *Id.* at 80.
50. *Id.* at 107.
51. Strong, *supra* note 29, at 23, 31.
52. Strong, *supra* note 24, at 26.
53. *Id.* at 29.
54. *See, e.g.*, STRONG & BRADEN, *supra* note 7, at 105-34.
55. Strong, *supra* note 24, at 28.
56. *Id.* at 30.
57. STRONG & BRADEN, *supra* note 7, at 105.

> We [Captains Strong and Wiles] had discussed the various options that were available, including anchoring the tug and barge (using the tug's anchor), putting a crew member from the tug on board the barge and then anchoring the barge, releasing the barge and concentrating on the tug and crew, or towing both the tug and barge away from the coast. [Captain Strong] decided to attempt to tow both vessels.[58] . . . [A]t 0431 we were directly to windward of the tug.[59]

It took three attempts to establish a tow. On the first attempt the tug was beyond the range of the tanker's rocket-propelled line launcher.[60] On the second pass they were successful in linking with a messenger line.[61] The ships, however, were drifting apart, and the messenger line parted before the mooring lines to be used for the tow could be hauled between the vessels.[62] Between each attempt the CHERRY VALLEY, longer than two football fields and laden with ten million gallons of fuel oil, had to make a complete circle to the east to return to the tug, which was drifting inexorably toward Bethel Shoal.[63] The third attempt would put the tanker very close to its limit: "[W]e were continuing to lose ground to the west and . . . the 60-foot curve was now a mile away. We were running out of room in which we could safely maneuver."[64] Fortunately, the third attempt was successful, but not without moments of high anxiety as the tow wire between the J.A. ORGERON and the POSEIDON appeared to pass under the CHERRY VALLEY. The tow was established at 0620 on November 15th.[65]

Most commentators have been unable adequately to describe the seamanship required of both captains, and the skills shown by the crews, in establishing the tow. How close they all came to disaster, and the cool presence of mind necessary to continue in the face of a known risk, also taxes the vocabulary. Captain Strong reports that in the troughs of the waves the fathometer showed as little as "a scant, scary 10 feet between the keel and the bottom," and the wake of the ship was "brown with mud and sand" churned up by its propeller.[66]

But the difficulties did not end with the establishment of the tow: for a tanker to tow a tug and barge in such conditions requires continued

---

58. Strong, *supra* note 29, at 23-24.
59. *Id.* at 25.
60. *Id.* at 27.
61. *Id.* at 26.
62. *Id.*
63. *Id.*
64. Strong, *supra* note 24, at 31.
65. STRONG & BRADEN, *supra* note 7, at 133-34.
66. *Id.* at 139.

seamanship of a very high order.[67] In addition, the CHERRY VALLEY was using lines designed for mooring, not towing, and not new lines, at that.[68] In the howling northeasterly, it proved impossible to make progress directly offshore; the vessels had to creep cautiously southeast.[69] Captain Strong noted: "Eventually we settled on a course of 145°, which could generally be steered with our rudder amidships. We would stay on this general course for the next 10 hours, moving 11 miles to the south but only 0.75 miles to the east, on a course made good of about 180°."[70]

Only after the tug and barge were securely in tow did Captain Strong learn the special nature of the barge's cargo.[71] In response to Captain Strong's inquiry about the cargo, Captain Wiles explained: "'Well, I didn't want to tell you before,' Lanny responds, his words coming slower than normal. 'But it's the liquid fuel cell for the space shuttle.' Seeming to guess my next question, whether the tank is potentially explosive, he adds, 'Don't worry, it's inerted.'"[72] Only then did Captain Strong call his employer, Art Bjorkner, general manager of the ship's owner, Keystone Shipping Company, briefly informing him of what had transpired and promising to call the office again at 0900.[73]

The notion of salvage did not enter the picture until that nine o'clock telephone conversation.[74] By that time, Bjorkner had assembled a management team to take Strong's call, including Keystone's general counsel.[75] As Captain Strong recounted:

> Then a voice I don't recognize, brusque and distant through the speaker phone, comes to my ear. "Captain Strong, Ralph Hill, general counsel for Keystone. Congratulations on a terrific feat of seamanship," he says. "I want to let you know that you have done something pretty

---

67. Strong, *supra* note 29, at 24-25.

68. "The standard mooring lines that we carried were 720-foot, [25] 8-braid poly-Dacron with a new breaking strength of 137,000 lbs." *Id.* at 24-25.

69. In addition, the crew constantly had to adjust the tow to prevent chaffing and had to lubricate the contact points.

> The tow put great strain on the hawsers and chocks, however, which required constant attention in the form of "slushing," [basically lubrication]. In addition to the inherent dangers of being on deck in the storm, slushing put Cherry Valley's deck crew in constant danger of being struck by a parting line; a hawser that parts under great strain can snap like a giant rubber band, causing severe injury to all nearby.

Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 982, 1998 AMC 2383, 2387 (5th Cir. 1998).

70. Strong, *supra* note 29, at 27; *see also* STRONG & BRADEN, *supra* note 7, at 136-39.

71. STRONG & BRADEN, *supra* note 7, at 135.

72. *Id.*

73. *Id.* at 135-36.

74. *Id.* at 140.

75. *Id.* at 137, 140.

> extraordinary and that you are probably entitled to salvage rights to the tug, barge, and fuel cell. You didn't happen to get the captain of the tug to agree to a Lloyd's Open Form, did you?"[76]

Lloyd's Open Form is the standard form contract used in salvage operations.[77] It is designed for and used by professional salvors, not accidental ones such as Captain Strong and the CHERRY VALLEY.[78] Under the circumstances, after the events of that morning off Bethel Shoal, Captain Strong must have found this a peculiarly lawyerly question.[79] He replied: "No. That never entered my mind. All we were trying to do was help the five guys on the tug .... I certainly wasn't thinking about salvage rights; I just wanted to help them."[80]

As a merchant marine captain, and a graduate of Maine Maritime Academy, Captain Strong had a knowledge of maritime law; by this time, he also knew of the importance of the barge's cargo. Nevertheless he reported:

> Knowing that we had the possibility of a claim for salvage against the two vessels was interesting but did not change the parameters of the rescue: keep the five men aboard *Orgeron* safe. Both the captain of *Orgeron* and I were ready to let the barge go if it was going to jeopardize their safety.[81]

Captain Strong was also in communication with Bill Knodle:

> [T]he port captain at NASA's Michoud Assembly Facility at New Orleans .... He was also exploring the possibility of trying to put someone aboard the barge from a helicopter to try to anchor the barge. Due to the severity of the weather and the fact that no one could convince a pilot to fly, this idea was tabled.[82]

Knodle, however, was able to find a tug willing to leave Port Canaveral, the SOUTH BEND.[83] The SOUTH BEND reached the CHERRY VALLEY and its two-ship tow in the early afternoon of November 15th.[84]

---

76. *Id.* at 140.
77. *Id.* at 141.
78. *Id.*
79. He wrote:

> Most of us in the business of transporting cargo on the high seas don't think about Lloyd's Open Forms; they are part of the realm of professional salvors who don't want to leave their compensation to chance or the whims of the courts. So far it looks like we might have a claim for salvage, but—regardless—my first priority is to keep the crew of the *Cherry Valley* and the *Orgeron* safe.

Id.

80. *Id.* at 140.
81. Strong, *supra* note 29, at 24.
82. *Id.* at 23; *see also* STRONG & BRADEN, *supra* note 7, at 139.
83. Strong, *supra* note 29, at 23.
84. *Id.* at 24.

After spending the afternoon trying, but failing, to establish a tow with the J.A. ORGERON, the SOUTH BEND's captain decided to take shelter in Fort Pierce until the weather abated.[85] However, the SOUTH BEND began taking on water en route, put out a "Mayday," and was just able to save herself from sinking by running aground.[86]

With CHERRY VALLEY and her tow making little easting against the wind and stormy seas, Captain Strong decided to anchor.[87] "At 1724 all three of us are safely at anchor in 63 feet of water."[88] At anchor they were able to establish new tow lines as insurance and to relieve the strain on the two mooring lines in use.[89] The tenuousness of the situation was evident when one of the original tow lines parted as the new lines were being established.[90] At 2045 on November 15th, at anchor, the tug J.A. ORGERON and the tanker CHERRY VALLEY were connected by four lines.[91] There they could wait, not in comfort, but in a relatively stable situation, for Tropical Storm Gordon to pass.[92]

On the next day, November 16th, when the storm had abated somewhat, another two tugs, the DOROTHY MORAN and the OCEAN WIND, set out from Cape Canaveral to help.[93] They arrived at the scene early on the morning of November 17th.[94] However, Keystone's lawyers were now involved.[95] Concerned that these tugs might be on salvage rather than towing contracts, the lawyers worried that if CHERRY VALLEY surrendered its tow, it might also surrender its priority salvage rights.[96] While the lawyers and Keystone management fussed over this in their offices, "sorting out the paper work," Captain Strong fumed.[97]

> I look at the clock on the wall of my office, 0930. I think for a few seconds, take a deep breath, and say, "I'll give you 30 minutes. At 1000 I'm turning them loose."
>
> "You know I can fire you, don't you?"
>
> "Yup."

---

85. *Id.* at 25.
86. *Id.* at 26.
87. STRONG & BRADEN, *supra* note 7, at 148.
88. *Id.* at 149.
89. Strong, *supra* note 29, at 25-27.
90. *Id.*
91. STRONG & BRADEN, *supra* note 7, at 155.
92. *Id.* at 154-55.
93. *Id.* at 158-61.
94. *Id.* at 157-65.
95. *Id.*
96. *Id.*
97. *Id.* at 157-65.

> Ralph was not happy with a junior captain questioning his authority, but he can't replace me in the next 30 minutes, either. I like sailing as captain, but sometimes making the right decision is better than keeping a job, and I'm giving him a half hour more. After all, he has had since midday yesterday to get this sorted out.[98]

But the lawyers met the deadline and at 1000 on the 17th, the CHERRY VALLEY began the transfer of the tug and barge to the care of the tugs DOROTHY MORAN and OCEAN WIND. "Once the *Ocean Wind*'s line is secure they cut our last line. It is 1102 on the 17th of November, 1994."[99]

Matthew Murphy, in *Vero Beach Magazine*, had a nice concluding paragraph.

> At 3:32 p.m. on June 27, 1995, the space shuttle *Atlantis* lifted off from Florida's Kennedy Space Center. The flight marked both NASA's hundredth manned mission and the first docking of a space shuttle with the Russian space station MIR. ET-70, the tanker *Cherry Valley*'s crew had saved, propelled that mission into orbit.[100]

The extraordinary steadfastness and seamanship of Captain Strong and his crew has brought them wide recognition within the merchant marine field. Captain Strong and his crew were awarded the prestigious American Merchant Marine Seamanship Trophy, awarded in special recognition of outstanding feats of seamanship, by the Maritime Administration,[101] the American Institute of Merchant Shipping Citation of Merit, and the United Seamen's Service AOTOS Mariner's Plaque.[102] Captain Strong's alma mater, the Maine Maritime Academy, recognized him with its Outstanding Alumnus Award and its Presidential Commendation.[103] In announcing his decision, the trial judge, Judge Stanwood Duval of the United States District Court for the Eastern District of Louisiana, in New Orleans, said, inter alia:

> The actions of the *Cherry Valley* through its captain, crew, and owner were far above and beyond the call of duty. They all showed great courage, skill, and more importantly were a paradigm of the most noble instinct of humankind, to risk person and property for another. . . . Neither the Coast Guard nor anyone else had any capability of rescuing the flotilla. . . . To save the crew of the endangered tug and her tow, *Cherry Valley* and the

98. *Id.* at 162-63.
99. *Id.* at 164.
100. Murphy, *supra* note 14, at 36.
101. STRONG & BRADEN, *supra* note 7, at 249. It had not been awarded for some years. You can see it in the American Merchant Marine Museum at Kings Point, Long Island, New York.
102. *Id.* at 250.
103. *Id.*

> crew voluntarily put themselves in a position where slight miscalculation could have led to *Cherry Valley*'s crewmembers' serious injury or to the *Cherry Valley*'s destruction and catastrophic pollution of the Florida coastline.[104]

The invoice[105] from Martin Marietta to NASA for the ET-70 had an estimated price of $53,834,000.[106] The ET-70 was one of an order of sixty fuel cells for $3.4 billion.[107] Since the price of overhead diminished slightly as production progressed, the invoice estimate for the next tank in the production cycle, ET-71, was $51,387,000.[108] The CHERRY VALLEY's crew and owner thus had a substantial salvage claim; on December 12, 1994, they filed suit in the Eastern District of Louisiana.[109] The Justice Department trial attorney and NASA recommended a settlement of $5 million, but the Associate Attorney General, apparently under the belief that all that was involved was a two-and-one-half-day delay of the tanker, ordered that the settlement be reduced to $1 million.[110] Trial was thus inevitable.

At trial, and on appeal, a great deal hinged on the price to be attributed to the ET-70.[111] In late 1992, NASA solicited an option price for four more fuel cells beyond the sixty for which it had originally contracted; Martin Marietta's price estimate per tank was $19,014,479,

---

104. *Id.* at 226-28.

105. Actually, the invoice was entitled "a 'Material Inspection and Receiving Report,' otherwise known as a 'DD-250.'" Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 982, 1998 AMC 2383, 2388 (5th Cir. 1998).

106. *Id.*

107. *Id.*; *see also* STRONG & BRADEN, *supra* note 7, at 199.

108. *Margate Shipping*, 143 F.3d at 982, 1998 AMC at 2388. According to Judge Jolly: "The difference in price is basically attributable to the fact that, as the contract progressed, various overhead items declined in cost." *Id.* Does this make sense? Plaintiff's expert Fred Farkouh, a New York-based CPA with a background in maritime transport litigation explained "marginal cost" as production progresses with the following analogy:

> It cost Ford Motor Company $6 billion to develop the Ford Taurus, which meant that the first car off the assembly line cost $6 billion to produce.
>
> "[Y]ou would say, I want the second one, the marginal cost [the cost of material and labor] is only six thousand dollars. I'll take the second one."

STRONG & BRADEN, *supra* note 7, at 216-17. That rather demolishes Judge Jolly's conception of diminishing overheads, does it not? This small but continuous diminution in cost is more likely attributable to efficiencies and economies of scale.

109. The CHERRY VALLEY had also salvaged the J.A. ORGERON, so the latter and its owner Montco were also defendants. *Margate Shipping*, 143 F.3d at 976, 983, 1998 AMC at 2383, 2389. Their role, however, was not problematic. As a maritime operation, they understood in a way that the Associate Attorney General did not.

110. STRONG & BRADEN, *supra* note 7, at 200.

111. *Id.* at 217.

based on labor and material, ignoring overhead.[112] NASA argued that this should be the value attributed to ET-70 for salvage purposes.[113] Keystone Shipping Company, the parent of plaintiff Margate Shipping Co., the owner of the CHERRY VALLEY, argued that "the true costs to the taxpayer were in excess of $90 million."[114] Judge Duval rejected both extremes[115] and used the invoice estimate for ET-71 as the probable replacement of ET-70 had it been lost[116] and thus awarded plaintiffs $6,406,440.[117] The government appealed.

II. ABOUT SALVAGE LAW[118]

> Salvage is the compensation allowed to persons by whose voluntary assistance a ship at sea or her cargo or both have been saved in whole or in part from impending sea peril, or in recovering such property from actual peril or loss, as in cases of shipwreck, derelict, or recapture.[119]

Any account of the law of salvage should explain two curiosities, expressed in *The Sabine*'s oft-quoted definition. First, for anyone immersed in terrene law of the Anglo-American tradition, it is remarkable that there should be salvage awards in our maritime law; were a similar act of salvage performed on land, our courts would not give an award to the rescuer, but would rather regard him as a mere volunteer or

---

112. *Id.*; *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2388-89 ("The option provided for a thirty-six month minimum lead time for the order of an additional tank, and although NASA provided no consideration for the option, Martin Marietta declared that its terms constituted a 'firm price' offer."). An option without consideration? Under U.C.C. section 2-105(1), the ET-70 is a good, hence a firm offer is, within limits, binding. *See* U.C.C. § 2-205 (1977); *Margate*, 143 F.3d at 983, 1998 AMC at 2389 ("The government never accepted this offer, however, and it was eventually withdrawn, again at NASA's specific request, approximately six months before the events in this case.").

113. STRONG & BRADEN, *supra* note 7, at 210.

114. *Id.* at 216.

115. *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2390 ("Judge Duval explicitly rejected the government's argument for a $19 million replacement cost based on the withdrawn 1992 option, calling it "much too speculative." He also rejected Margate's argument for a $92 million "cost-accounting" valuation.").

116. *Id.*, 1998 AMC at 2389 ("With regard to ET-70, Judge Duval determined that it was specialized property without a market value, and therefore most appropriately appraised at its 'replacement cost.' This value, he found, was the production cost of ET-71, $51,387,000, because ET-71 was the likely 'replacement' of ET-70.").

117. STRONG & BRADEN, *supra* note 7, at 229; *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2390.

118. "Salvage" here is voluntary, as distinguished from salvage service performed for a fee pursuant to a contract. In *The Enos Soule*, the distinction was dubbed "salvage service" versus "salvage enterprise"—not an intuitively clear locution. 95 F. 483 (S.D.N.Y. 1899). The distinction, however, mattered, because the in rem action against the barge for the fee ($100 a day) failed.

119. *The Sabine*, 101 U.S. 384, 384 (1880).

an officious intermeddler.[120] Chief Justice Marshall made the point elegantly:

> If the property of an individual on land be exposed to the greatest peril, and be saved by the voluntary exertions of any person whatever; if valuable goods be rescued from a house in flames, at the imminent hazard of life by the salvor, no remuneration in the shape of salvage is allowed. . . . Let precisely the same service, at precisely the same hazard, be rendered at sea, and a very ample reward will be bestowed in the courts of justice.[121]

The second curiosity is that salvage awards are given only for property, and not for lives saved.[122] Although this was modified slightly by statute in 1912, there still is no award for lives saved except insofar as it is incidental to the saving of property.[123] Thus, as the CHERRY VALLEY case's facts illustrate, the motivation of maritime rescuers is clearly separated from the reward.

Chief Justice Marshall's justification for salvage awards followed the paragraph quoted above:

> The allowance of a very ample compensation for those services, (one very much exceeding the mere risk encountered, and labour employed in effecting them,) is intended as an inducement to render them, which it is for the public interests, and for the general interests of humanity, to hold forth to those who navigate the ocean. It is perhaps difficult, on any other principle, to account satisfactorily for the very great difference which is made between the retribution allowed for services at sea and on land: neither will a fair calculation of the real hazard or labour, be the foundation or such a difference; nor will the benefit received always account for it.[124]

Salvage is "an inducement," yes, but that does not account for its absence on land. In some situations, saving the crew of a vessel in distress but not the cargo or the vessel itself may be all that is possible; no reward would be due the rescuers no matter what the hazard or effort involved.[125] That mariners face the hazards of navigating the ocean distinguishes salvage at sea from salvage upon the land, and shipping furthers "the public interests, and . . . the general interests of humanity."[126] This has

---

120. According to the comprehensive treatise, *Benedict on Admiralty*, unlike us, the Romans did provide a recovery to a terrene volunteer. 3A BENEDICT ON ADMIRALTY § 6, at 1-6 to 1-7 (7th ed. rev. 2006) (citing JAMES KENT, COMMENTARIES ON AMERICAN LAW 6 (12th ed. 1873)).

121. Mason v. The Blaireau, 6 U.S. 240, 266 (1804) (Marshall, J.).

122. *Id.*

123. ROBERT FORCE & MARTIN J. NORRIS, THE LAW OF SEAMEN § 9:38 (5th ed. 2003).

124. *Mason*, 6 U.S. at 266.

125. It is not hard to imagine a slight deterioration of weather in the CHERRY VALLEY-ORGERON situation making it impossible to save all three vessels, only the tanker itself; then a transfer of the tug's crew would have saved the men, but earned no salvage. *See id.*

126. *Id.*

generally served as justification, and certainly appeals to economists; however, it does not account for the limitation of salvage awards to those who save property, ships and/or cargoes, but not lives. If we were to encourage mariners to brave the hazards of ocean navigation by promising a reward to their saviors should they encounter distress, one might think that reward would extend to persons saved as well as to property salvaged.

Nor does Chief Justice Marshall do justice to a third feature of salvage, implicit in *The Sabine*'s definition: an award is contingent upon success—success in salving property, that is, not persons.[127] Surely the justification of financial inducement should reward valiant efforts, even when they fall short of saving all the cargo. Yet Chief Justice Marshall's "inducement to render rescue services" is pretty much all we get in subsequent writing.[128]

History, or at least reasonably accessible history, offers little help. According to *Benedict on Admiralty*, the most thorough and comprehensive source, and the one most often relied upon, the first mention of salvage law was in 900 B.C.E. in the statutes of Rhodes, the leading maritime power of its time.[129] It was adopted in various forms by the maritime city-states around the Mediterranean and later in the Baltic. It became recognized as *jus gentium* in the maritime cities of the Mediterranean and Aegean seas.[130] Under Rhodian law articles XLV and XLVI, a reward of "one-fifth of what he saves" is given to the person who salves property from a wreck[131] or finds and preserves a vessel lost at sea.[132] It was always a reward, never on a *quantum meruit* basis, or for labor.[133] Nevertheless, the Romans did not make it a part of their comprehensive codes, apparently being "content to adopt the Rhodian maritime regulations."[134] Subsequently, many maritime nations adopted statutes differing in the proportion of the salved property to be awarded the salvor, but not in other respects of interest here.[135]

---

127. The Sabine, 101 U.S. 384, 384 (1880).
128. *The Blaireau*, 6 U.S. at 266.
129. 3A BENEDICT OF ADMIRALTY, *supra* note 120, § 1.
130. *Id.* § 1, at 1-2.
131. *Id.* § 5, at 1-6.
132. *Id.*
133. *Id.* § 3, at 1-4.
134. *Id.* § 6, at 1-8.
135. The treatise focuses on the award: the Marine Ordinances of Trani promulgated in 1063 A.D. provide for one who finds goods to keep half; the Laws of Oleron are quoted in full, presumably because the author thought them too boring to read and summarize; the Laws of the Hanse Town—the Hanseatic League: eighty-one cities now in Germany—at the end of sixteenth century provided a reward for mariners who salvaged the goods when their ship foundered; the

The United States, however, has always had a common law system of salvage awards. Prior to the American Revolution, salvage cases were quite common in the Colonial Vice-Admiralty Courts. For example, "[a] dozen cases of the kind came before the court of vice-admiralty of New York between 1729 and 1770."[136] Admiralty courts have had exclusive jurisdiction, but there have also been cases in state common law courts where the action has been in *quantum meruit*,[137] or for contractual salvage.[138] This tradition continued after the Revolution, as can be seen in the major 1804 case quoted above, *Mason v. The Blaireau*.[139]

This brings us to the seminal case from the United States Supreme Court, *The Blackwall*, decided in 1870. In the early hours of August 24, 1867, the British ship BLACKWALL, with a cargo of wheat worth $60,000, caught fire while at anchor in ten fathoms of water in San Francisco harbor.[140] The master and crew of the BLACKWALL could not control the fire and had abandoned the burning vessel to escape in small boats.[141] The steam tug GOLIAH carried crews and engines from the San Francisco fire department to the burning ship and, at some risk, lay alongside while the fire was extinguished.[142] After the BLACKWALL's crew had reboarded, the GOLIAH then towed the ship to safety.[143] The owners and master of the GOLIAH claimed salvage, although the master claimed no financial interest.[144] "The District Court decreed 'that libellants do have and recover of the claimants $10,000 with their costs.'"[145] The Circuit Court of the United States for California affirmed and the owners of the BLACKWALL appealed to the Supreme Court.[146]

Justice Clifford's opinion is comprehensive, dealing briskly with points adequately covered by precedent. For example, the GOLIAH could not have put out the fire without the fire department and its

---

Marine Ordinances of Louis XIV merely required mariners who save goods when their ship founders to be paid their wages. *Id.* § 10, at 1-16.

136. *Id.* § 14, at 1-20.

137. Reynolds v. Browning, Wells & Co., 224 A.D. 442 (N.Y. App. Div. 1928); The Cheeseman v. Two Ferryboats, 5 F. Cas. 528 (S.D. Ohio 1870); O.F. Shearer & Sons, Inc. v. Decker, 349 F. Supp. 1214 (W.D. Va. 1972).

138. Merritt & Chapman Derrick & Wrecking Co. v. Tice, 77 A.D. 326 (N.Y. App. Div. 1902).

139. Mason v. The Blaireau, 6 U.S. 240, 240 (1804).

140. The Blackwall, 77 U.S. 1, 8 (1870).

141. *Id.* at 8-9.

142. *Id.*

143. *Id.* at 8-10.

144. *Id.* at 8.

145. *Id.* at 5.

146. *Id.* at 4.

machines, just as, conversely, without the tug, the fire department could not have done anything for the BLACKWALL.[147] That the fire department made no salvage claim did not destroy the GOLIAH's claim:

> Useful services of any kind rendered to a vessel or her cargo, exposed to any impending danger and imminent peril of loss or damage, may entitle those who render such services to salvage reward. Persons assisting to extinguish a fire on board a ship, or assisting to tow a ship from a dock where she is in imminent danger of catching fire, are as much entitled to salvage compensation as persons who render assistance to prevent a ship from being wrecked, or in securing a wreck, or protecting the cargo of a stranded vessel.[148]

But the case is most renowned for its enumeration of the factors that enter into a court's consideration in calculating a salvage award. Justice Clifford's famous language has become known as "*The Blackwall* factors":

> Nothing remains to be considered but the question whether the amount awarded in the court below to the libellants was correct.... Courts of admiralty usually consider the following circumstances as the main ingredients in determining the amount of the reward to be decreed for a salvage service: (1.) The labor expended by the salvors in rendering the salvage service. (2.) The promptitude, skill, and energy displayed in rendering the service and saving the property. (3.) The value of the property employed by the salvors in rendering the service, and the danger to which such property was exposed. (4.) The risk incurred by the salvors in securing the property from the impending peril. (5.) The value of the property saved. (6.) The degree of danger from which the property was rescued.[149]

In support, he immediately offers explanation and justification.

> Compensation as salvage is not viewed by the admiralty courts merely as pay, on the principle of a quantum meruit, or as a remuneration PRO OPERE ET LABORE, but as a reward given for perilous services, voluntarily rendered, and as an inducement to seamen and others to embark in such undertakings to save life and property. Public policy encourages the hardy and adventurous mariner to engage in these laborious and sometimes dangerous enterprises, and with a view to withdraw from him every temptation to embezzlement and dishonesty, the law allows him, in case he is successful, a liberal compensation.[150]

---

147. *Id.* at 11.
148. *Id.*
149. *Id.* at 13-14.
150. *Id.* at 14.

These points deserve repeating: (1) salvage is a reward for voluntary services; (2) it is also an inducement to potential salvors; (3) it is awarded only if "he is successful," no cure-no pay; (4) and it must be liberal to remove "every temptation to embezzlement and dishonesty," meaning, presumably, temptations such as to capture the salved cargo for oneself and abandon the salved vessel and/or its crew.[151]

All these arguments look to the situation of the mariner who salvages the distressed property. The owner of the salvor vessel, however, is the principal plaintiff, because it is the owner's property that is put at risk in the operation. As Justice Clifford explained in *The Blackwall*: "Beyond doubt remuneration for salvage service is awarded to the owners of vessels on account of the danger to which the service exposes their property, and the risk which they run of loss in suffering their vessels to engage in such perilous undertakings."[152] Notice that this enhances the third and fourth *Blackwall* factors' importance: "The value of the property employed by the salvors in rendering the service, and the danger to which such property was exposed," and "the risk incurred by the salvors in securing the property from the impending peril."[153]

Justice Clifford then worked through these factors, although not in precise detail or with any pretense of scientific accuracy. Although the Supreme Court approved the award of $10,000, it should be noted that the trial court had not taken into account that had the San Francisco fire department joined the claim, as a party equally responsible for saving the BLACKWALL and its cargo, it would have taken half the award. Accordingly, it was appropriate to award only $5,000, half the original award to the steamtug GOLIAH.[154]

The Blackwall became the benchmark of U.S. salvage law, but in the last fifty years the law has seen a new factor enter the list as a result of the grounding of the large tankers, TORREY CANYON and EXXON VALDEZ. Environmental damage can occur either by the loss, rather than salvage, of the vessel in distress, or by the loss of the salving vessel undertaking the salvage operation.[155] The latter was the principal risk in

---

151. Judge Clifford wrote undertakings to save life and property, a slight inaccuracy; there is no reward for the saving of life. *Id.*

152. *Id.* at 13.

153. *Id.* at 14.

154. *Id.* at 15.

155. The problem of oil tankers' breaking up has brought the first change in the standard form salvage contract, Lloyd's Open Form, for many years. In 1980, it added a clause changing the "no cure-no pay" basis if the "salved vessel is a tanker laden with oil" when the salvor gets "expenses plus 15% even if the vessel and cargo are lost." JO DESHA LUCAS, CASES AND MATERIALS ON ADMIRALTY 705 (1996).

the CHERRY VALLEY's rescue of the J.A. ORGERON and its tow, the NASA booster rocket. The CHERRY VALLEY was a laden tanker; had it foundered on the Bethel Shoal, miles of Florida beaches and some of the most sought-after beach-front property would have been severely polluted at a great cost to the ship's owners.[156] While Judge Jolly included this risk in the fourth *Blackwall* factor,[157] it might well be considered an independent factor, as the trial court had done.[158] Now that society recognizes the importance of environmental damage, it might be expected that, whenever relevant, this factor will play a significant role in determining salvage awards.

III. LANDES AND POSNER'S ECONOMIC MODEL OF SALVAGE[159]

> The circumstances in which salvage awards are allowed and the criteria governing the size of the award suggest that the purpose of salvage awards is to encourage rescues in settings of high transaction costs by simulating the conditions and outcomes of a competitive market.[160]

This captures the essence of Landes and Posner's economic model of salvage law. Judge Jolly was taken by Landes and Posner's thesis[161] and used it as an explication of the *Blackwall* factors and the background[162] for his application of the factors to the CHERRY VALLEY's rescue of the tug J.A. ORGERON, the barge POSEIDON, and the latter's valuable cargo.

Economists are happiest with perfect markets.[163] Where the perfect market model does not fit, they attribute the problem more to the world than to the model, hence the concept of "*imperfect* markets." A rescue at sea is a radically imperfect market. Commonly—if one can say "commonly" of such a rare and varied activity—a rescue at sea has only one party to be rescued and one party in a position to make the rescue. It

---

156. 33 U.S.C. § 2702(a) (2000) ("Notwithstanding any other provision or rule of law . . ., each responsible party for a vessel or a facility from which oil is discharged . . . into or upon the navigable waters or adjoining shorelines . . . is liable for the removal costs and damages . . . that result from such incident."); *see also id.* § 2718(c).

157. "[T]he fourth factor is intended to provide a direct measure of some of the salvor's actual salvage costs. In this context, there is no principled reason to distinguish between the costs imposed by the risk of injury or death, and those costs imposed by the risk of negligence liability or strict environmental damage liability." Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 988, 1998 AMC 2383, 2397-98 (5th Cir. 1998).

158. *Id.* at 990, 1998 AMC at 2400.

159. Landes & Posner, *supra* note 8, at 83.

160. *Id.* at 100.

161. *Margate Shipping*, 143 F.3d at 986-87, 1998 AMC at 2395.

162. "With this background in mind. . . ." *Id.* at 987, 1998 AMC at 2396.

163. For an extended discussion of the concept of the perfect market, see JEANNE LORRAINE SCHROEDER, THE TRIUMPH OF VENUS 107-38 (2004).

is a bilateral monopoly. But should the parties actually negotiate a contract, it would clearly be made under conditions of severe stress, especially on the side of the buyer-salvee facing imminent death and 100% loss. Landes and Posner recognize,[164] as have the courts in the few opportunities given them,[165] that this would make such a contract unenforceable. Hence, they argue, the law imposes an efficient contract on the parties, the contract that would have been reached in a perfect market.[166] Their analysis of the perfect market in rescues will thus determine the price imposed by a court retrospectively.

Landes and Posner's model is quite general and is not specific to rescues at sea. Sellers are professional rescuers, although the model defines this in such a way that all salvors count as professional rescuers.[167] Landes and Posner make some sophisticated-looking assumptions in order to apply the standard analysis in which any seller sells until the diminishing marginal price (the first derivative of its supply function) equals the marginal cost and a buyer only buys if marginal utility is not less than price.[168]

> The probabilities [of the hazard occurring and, if so, of rescue], in turn, are assumed to be continuously differentiable functions of safety and rescue inputs, respectively, as in
>
> $$p^h = p^h(x) \quad (1)$$
> $$p^r + p^r(y) \quad (2)$$
>
> where x denotes the victim's inputs on safety that reduce the probability of the hazard ($p_x^h < 0$ and $p_{xx}^h > 0$) and y the resource inputs (or services) of the professional rescuer that increase the probability of rescue ($p_y^r > 0$ and $p_{yy}^r < 0$). Thus the marginal products of safety and rescue inputs are positive and diminishing.[169]

The CHERRY VALLEY case shows this assumption is false in the "typical" maritime rescue. The marginal product of the rescue inputs was zero, zero, zero, then quite discontinuously it became huge. In

---

164. "If the contract was first entered into at the time the ship was endangered, the presumption that it should be enforced fails. The rescuer may well have extracted extortionate terms from the victim, or, less obviously, the latter may have extracted unduly favorable terms." Landes & Posner, *supra* note 8, at 101.

165. "The *in extremis* agreement will be enforced according to its terms only if the judge finds it to have been fairly negotiated." Ergo no "extortionate bargain." GILMORE & BLACK, *supra* note 9, at 579 (citing Higgins v. M/V Tri-State, 99 F. Supp. 694 (S.D. Fla. 1951)); Magnolia Petroleum Co. v. Natural Oil Transp. Co., 281 F. 336 (S.D. Tex. 1922) (collecting prior cases).

166. Landes & Posner, *supra* note 8, at 101.

167. "Professional rescue is our term for the sale (whether voluntary or through operation of law) of rescue services by profit-maximizing firms to victims of [86] hazards." *Id.* at 85-86.

168. *Id.* at 86.

169. *Id.*

salvage operations, the assumptions of continuity and differentiability are false.[170]

Given this assumption, Landes and Posner can apply the usual perfect market assumptions to rescuers as sellers and victims as buyers.

> We assume that (1) rescue services are sold by a competitive industry for a fee contingent on a successful rescue; (2) each firm maximizes expected profits; (3) firms have identical entry prices; (4) there is a sufficiently large number of rescue firms (including potential entrants) to generate an industry marginal cost curve that is constant and equal to marginal cost; and (5) provisionally, the potential victim buys rescue services from a single firm and the latter sells services exclusively to this victim.[171]

From this it follows that a given rescue's price will be the marginal cost to the rescuer of making the rescue, which is the usual perfect market equilibrium.[172] And if rescue is on a "no cure-no pay" basis, the lower the probability of the rescuer's success, the higher the price.[173]

> The higher the probability of rescue, the more certain payment is. The rescue firm will therefore charge a lower price per unit of rescue, since collection is more likely. The lower the probability of rescue, the higher will be the price charged, to compensate the rescuer for the greater probability that the rescue will be unsuccessful and that he will therefore not recoup his expenditures.[174]

As usual, this arrangement yields the optimal expenditures on safety and rescue, thus the optimal bargain between rescuer and rescued. It also maximizes social utility,[175] meaning that it optimizes the change in gross domestic product that results from the rescue or its failure. This is an important result for Landes and Posner; "assuming the purpose of the law is to promote economic efficiency," it justifies using this arrangement as the default position for courts.[176] Thus, they are able to

---

170. But does it matter? This is just the imposition of irrelevant sophistication from which nothing much is produced. The fancy mathematical modeling might be justified if it were used to derive results one might not have expected or might not otherwise have seen. Here it seems to serve not much other than to show it can be done. *See* Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 1998 AMC 2383 (5th Cir. 1998).

171. Landes & Posner, *supra* note 8, at 86.

172. "Competition among rescuers for victims will drive the expected price for rescue services in equilibrium to $pir\ vi = mc$ where $pir\ vi$ equals a particular probability-price combination to the ith victim." *Id.* at 86-87.

173. "Because of the contingent fee system, vi will be a multiple $(1/pir)$ of marginal cost; *i.e.*, the lower the probability of rescue, the greater will be the ratio of price to marginal cost." *Id.* at 87. Perhaps Judge Jolly missed this point.

174. *Id.*

175. *Id.* at 88-89 ("The equilibrium levels of x and y obtained in equations (8) and (9) are socially optimal.").

176. *Id.* at 90.

derive such results as "An increase in L_d[gross value of the rescue[177]] increases the marginal returns from both safety (x) and rescue (y), leading the victim to increase his purchase of both inputs."[178] In other words, more valuable properties are worth more protection and greater rewards for rescue.

But what if a calamity occurs and the market for rescue does not satisfy the model's conditions of perfection? That is, what about the normal situation in which there is no profusion of rescuers at hand?[179] First, suppose there is no time pressure on the single rescuer and victim, "[t]here is time for negotiation but little likelihood of another ship's chancing on the scene."[180] Transaction costs will still be high because the situation "invites haggling. The haggling may be protracted, costly, and sometimes unsuccessful in producing agreement on terms."[181] There is no support for this assertion in either the text or the footnotes; it appears empirical, thus in need of historical data. If it is merely the economists' speculation or armchair empiricism, it is of such consequence to the argument that one might expect better. How Captain Strong of the CHERRY VALLEY and Captain Wiles of the J.A. ORGERON behaved between 0100 and 0430 on November 15, 1994, and what their concerns actually were show just how utterly otherwordly this economic analysis is. How the two captains behaved and what their concerns actually were shows just how utterly otherworldly this economic analysis is. Captains Wiles and Strong, if they could be said to have negotiated at all, did so only over the course of action, and Captain Strong, who took all the discretionary risks and responsibilities, made the decisions. Recall that Captain Strong did not think of, or inquire as to, the nature or value of the tug's cargo, about which he learned nothing until after the crisis had passed.[182] But Landes and Posner are not troubled by reality; their point here is only that transaction costs may well be high in such a situation.[183]

Suppose then that transaction costs are too high for a rescuer and a victim to strike a bargain, or that there is no time for bargaining. At what level should a court set the price of a hypothetical rescue contract? The

177. "L_0 can be interpreted as the gross value of the rescue (i.e., the difference in wealth between the rescue and nonrescue states before deducting expenditures on rescue) and L_0 - vy the net value." *Id.* at 88.

178. *Id.* at 89.

179. *Id.*

180. *Id.* at 91.

181. *Id.*

182. *See supra* text accompanying notes 71-73.

183. Landes & Posner, *supra* note 8, at 90-91 n.18.

full value of the ship and cargo would be inefficiently high:[184] "[T]he victim will be led to a socially excessive purchase of safety inputs. Victims will be too safe, fearing that in the event of trouble they would lose everything."[185] Again the economist, thinking only of economic motivation, misses the primary motivation: the lives of crewmembers and passengers, if any. Think of a typical safety investment, such as the seat belt, the airbag, or the life-jacket. How much property is saved by our expenditures on these devices? Very little, one would think; they only save lives, and lives do not count in salvage awards. So under the Landes and Posner analysis, seat belts, airbags, and life-jackets are a "socially excessive purchase of safety inputs."

What about the other end of the scale with $0 as the imputed price?[186] This would be inefficiently low and would fail to induce any rescuers to come to the victim's aid.[187] Perhaps a suitable intermediate point would be the rescuer's costs? The problem with this arises when the rescuer's costs are greater than the aggregate value of the rescued victim's vessel and cargo.[188] If you take probabilities and potential downsides into account, the CHERRY VALLEY rescue seems to be such a situation. Consider the probability of the CHERRY VALLEY's foundering on Bethel Shoal, less than a mile to leeward, and its cargo's being distributed along Vero Beach. Thus, a salvage award of the entire value of the salved property would be inefficiently high, inducing over-expenditure on both safety and rescue; however, an award of zero would be inefficiently low.[189] Landes and Posner's solution "is to calculate the reward *that would have been negotiated in a competitive rescue market*."[190] And, they claim, "this model approximates the actual approach used by the courts in high-transaction-cost maritime-rescue cases."[191]

Altruism causes difficulties.[192] For Landes and Posner, it is not just about money; the altruist gets some sort of benefit (surely he *must*, otherwise he would not do it)

---

184. *Id.* at 91.

185. *Id.* at 92.

186. *Id.* at 93.

187. *Id.*

188. Notice that this is probably the norm, especially when one takes into account the probability of loss of the rescuer. Consider the cost of an Air Force or Coast Guard patrol aircraft search and then a ship and plane rescue of a sailboat.

189. *Id.* at 93 (mentioning "the value of the life or the other thing saved").

190. *Id.*

191. *Id.*

192. "We define a rescuer as altruistic if he is willing to supply rescue services in the absence of any expectation of being compensated for doing so." *Id.*

> such as public recognition as an altruist, or an enhanced probability that the rescuer would himself be rescued . . . should he at some future time find himself in peril. Altruism motivated by expectation of future benefits, "reciprocal altruism" as it is called, is probably unimportant in most present-day rescue settings involving strangers . . . . We shall therefore ignore reciprocal altruism.[193]

One would think this is a basic mistake. In both their behavior and their statements, Captains Wiles and Strong firmly have negated this idea of altruism. Apparently, Landes and Posner know nothing of the mores and values of those who mess around in boats or go to sea in ships. The culture is built on generalized reciprocal altruism: one simply rescues another in distress, although he still takes every care to avoid the need for reciprocity from whomever. Landes and Posner do recognize, in a footnote, that "[r]eciprocal altruism could be quite important in small communities."[194] Perhaps they miss the point that the mariner community is small, at least in the sense of relevant value commonality, cohesion, and mutual dependence. That is not, of course, to say that the community includes no deviants; there have always been pirates at sea, just as there have been bandits ashore. But money substitutes count, and are assumed to be substitutable for money.[195] This enables them (after some quasi-mathematical machinations) to conclude that optimizing future benefits here makes the altruist exactly like the professional with respect to the propensity to rescue another.[196] However, if the rescuer gets his jollies from making the rescue, he ought not be allowed to double his

---

193. *Id.*

194. *Id.* at 93 n.25.

195. "We assume for convenience that U [utility of making the rescue] is additive with respect to the rescuer's wealth and the victim's expected wealth . . . ." *Id.* at 94.

196. "We assume for convenience that U [utility of making the rescue] is additive with respect to the rescuer's wealth and the victim's expected wealth as in

$$U = g(W - C(y)) + h(W - (1 - p')L_0), \quad (12)$$

where W and W' are, respectively, the rescuer's and victim's endowed wealth, $C(y)$, p', and L_0 are defined as before [$C(y)$ is total costs, and L_0 is the "value of the ship and cargo or Smith's wealth"], and g and h are respectively the utility to the rescuer of his wealth and of the victim's expected wealth." *Id.* at 94. Richer people seem not to be altruistic, so as W increases, U diminishes. But notice how bizarre this is: they think the utility to the altruistic rescuer is a function of wealth and the jollies that one gets out of it! *See, e.g.*, KRISTIN RENWICK MONROE, THE HEART OF ALTRUISM: PERCEPTIONS OF COMMON HUMANITY (1996) (empirical study of altruistic behavior). Notice that the expression $(1 - p')L_0$ is the loss to the victim from not being rescued multiplied by the probability of not being rescued. Suppose that is the victim's life, i.e., $L_0 = W'$. Then (12) becomes

$$U = g(W - C(y)) + p'h(W'), \quad (12')$$

So the utility to the rescuer is the jollies he gets from his net wealth after the rescue, plus the jollies the victim gets from his present wealth, reduced by the probability of rescue. Is there any intuitive clarity in that? Why is there no probability of rescue in the rescuer's part of it?

recovery with a salvage award, especially because legal costs are not negligible.[197] "Thus, assuming strong altruistic motivations to rescue, a general rule permitting compensation would induce altruistic rescuers to claim compensation, creating heavy administrative costs but only a small increase in the resources allocated to rescue."[198] So Landes and Posner assume that there are no altruists.[199]

This analysis was about rescue in general. One might expect it to be at its best in maritime rescues where the rescuer is given a legal claim to a reward—salvage. It comes as the first example in part two of the article, *Applications and Extensions, A. Admiralty 1, Salvage.* The circumstances in which salvage awards are allowed and the criteria governing the award's size suggest that the purpose behind salvage awards is to encourage rescues in high-transaction-cost settings by simulating the competitive market's conditions and outcomes.[200]

Landes and Posner then proceed by taking the *Blackwall* factors and showing how positive and negative impacts on the rescuer's incentives simulate a competitive market.

> The factors that determine the amount of the salvage award are listed in Kennedy's salvage treatise as follows.... Each of these factors enumerated by Kennedy's provides relevant information for a legal system endeavoring to reconstruct the salvage contract that would have been negotiated ex ante if a competitive market transaction had been feasible.[201]

After all this we come down to the *Blackwall* factors? Of course one may lay claim to empirical accuracy for a model that amounts to a Taj Mahal around the *Blackwall* factors; virtually every court since 1870 has based its award on exactly those factors. The model's empirical accuracy

---

197. "This is because altruism acts as a substitute for compensation, inducing the rescuer to behave as if the victim's expected loss, weighted by *h'/g'* ['the marginal degree of altruism'], were the rescuer's loss."

But that means—"Since the enforcement of a legal claim for compensation is costly even if the claim is settled rather than litigated, we predict that a legal system concerned with maximizing efficiency would refuse to grant compensation in rescue situations where altruism provided a strong inducement to rescue attempts." Landes & Posner, *supra* note 8, at 94-95 (citations omitted).

198. *Id.* at 95.

199. "Assume also that rescuers no longer behave altruistically once the peril is passed; hence they enforce their legal right to compensation (*i.e.*, altruists do not view their compensation as part of the victim's loss)." *Id.* at 98.

200. *Id.* at 100.

201. *Id.* at 101-02. "Kennedy's" refers to KENNETH C. MCGUFFIE, LAW OF CIVIL SALVAGE (4th ed. 1958). The factors listed are, not surprisingly, the *Blackwall* factors: "A similar list [to Kennedy's] of the factors determining the amount of a salvage award in America appears in The Blackwell [sic], 77 U.S. (10 Wall.) 1 (1869). We prefer the Kennedy's enumeration because of its greater specificity." Landes & Posner, *supra* note 8, at 101 n.40.

is thus made tautological. Because the *Blackwall* factors' point was to assess the elements that determine the award, it is not surprising that they can be characterized as determinants of a hypothetical ex ante contract price in a hypothetical free market.

The fourth *Blackwall* factor—"The risk incurred by the salvors in securing the property from the impending peril"[202]—plays an obvious role. The higher the risk to the rescuer, the higher should be the reward. Or,

> [o]ur competitive rescue model requires that the greater the danger is, and hence the lower the probability of a successful rescue, the greater must be the aggregate compensation to the rescuer, holding constant the level of rescue inputs, assuming that the compensation is paid only if the rescue attempt succeeds. Thus, to make the rescuer's compensation a positive function of the degree of danger is consistent with efficiency considerations.[203]

Similarly, from the buyer of the service's point of view, the value of the property to be saved[204] will be a prime determinant of how much its owner will be willing to pay for its salvage. But because they are economists, Landes and Posner prefer to use cost rather than value:

> The value of the property saved is a measure of the victim's benefit from the successful salvage operation, but in a competitive market price equals marginal cost for all but the marginal buyer. It might appear that "fairness" would explain the emphasis on the value saved, but systems of price discrimination—*i.e.*, of making price vary in accordance with value rather than cost—are not generally applauded as fair.[205]

Landes and Posner do not deal expressly with the other *Blackwall* factors; perhaps they do not need to, as their role is all too obvious. In any maritime rescue scenario, the factors' importance as determinants of the award will differ greatly. For example, the first *Blackwell* factor, "[t]he labor expended by the salvors in rendering the salvage service,"[206] is likely to be of determinative consequence only in cases of low-valued victims. Others might already be incorporated in the concept of risk. For example, the third and sixth *Blackwell* factors, "[t]he value of the property employed by the salvors in rendering the service, and the danger

---

202. The Blackwall, 77 U.S. (10 Wall.) 1, 13-14 (1870).

203. Landes & Posner, *supra* note 8, at 103.

204. "The value of the property saved" is the fifth *Blackwell* factor. *The Blackwall*, 77 U.S. at 13-14.

205. Landes & Posner, *supra* note 8, at 103.

206. *The Blackwall*, 77 U.S. at 13-14.

to which such property was exposed"[207] and "[t]he degree of danger from which the property was rescued,"[208] might both be incorporated in the calculation of the fourth *Blackwell* factor "[t]he risk incurred by the salvors in securing the property from the impending peril."[209] As they worked from a 1958 text's[210] interpretation of an 1870 case, it is hardly surprising that Landes and Posner did not incorporate environmental risk into the analysis; however, there would be no difficulty in incorporating this seventh factor into their model. It is, after all, only a hypothetical ex ante perfect market negotiation, so anything relevant can easily be incorporated.[211]

Landes and Posner's explanation of other aspects of salvage law is more interesting. Why should payment be contingent on success? They draw analogy with hourly pay or piece work: hourly pay works when monitoring work and effort is inexpensive relative to measuring output. Thus, "in rescues at sea, where the award is made after the event, the costs of monitoring effort and energy are obviously high, and here the cost advantage is likely to lie with monitoring the output of which success is a crucial ingredient."[212] It makes sense. As far as their explanations go, this is the bright spot of the article.

Why is salvage awarded only for property salved and not for persons? Altruism is brought back to save the day. Mariners' lives are "extremely valuable . . . but usually can be saved at lower cost than the ship itself or its cargo."[213] That makes altruism more important when only lives are at stake, as the professional rescuer's rewards depend on cargo. So if both lives and cargo are saved,

> it is vital to reward the salvor for the lives as well as property saved because saving a life may require the salvor to forgo saving some of the property. To deny a reward for life salvage in these circumstances would be to increase, perhaps dangerously, the opportunity costs of altruistic life saving.[214]

Thus, Landes and Posner seem to be recommending a change in salvage law to reward salvors for lives as well as cargo. How would that play out in the CHERRY VALLEY case? Both captains were ready to abandon

---

207. *Id.*
208. *Id.*
209. *Id.*
210. *See generally* MCGUFFIE, *supra* note 201.
211. The model might thus be criticized as analytical, thus of no explanatory value; it can always be adjusted to produce the desired answer.
212. Landes & Posner, *supra* note 8, at 104.
213. *Id.*
214. *Id.* at 104-05 (citation omitted).

the barge POSEIDON should that be necessary to save the lives of the tug's crew. Suppose the CHERRY VALLEY had saved only the tug and its crew. Should it then be entitled to an award still based on the value of the barge's cargo? The (reciprocal) altruism motivating the mariners involved makes a mockery of all these calculations.

Landes and Posner aimed to create a model that will "encourage rescuers to provide the socially desirable quantity of rescue inputs."[215] A perfect market, or a perfect market simulation, is designed to that end. Independent of that normative goal, they say that they find an "impressive congruence" between actual court decisions and their model's predicted outcomes based on economic efficiency.[216] Thus, Landes and Posner wrote:

> Our findings are a challenge to the scholars who are unsympathetic to economics even as a method of positive (as distinct from normative) analysis of law—and who, in the areas of law surveyed in this paper, have tended to "explain" legal outcomes by reference to notions of fairness or justice—to develop a positive theory of law more powerful and comprehensive than the economic.[217]

If they are correct, their model should be of great value to predict outcomes, which will thus facilitate settlements. However, a review of the history of our courts' salvage awards would suggest that claims of explanatory, let alone predictive, power should be treated skeptically. Having reviewed awards and claims of guidance, one prominent treatise concluded that "[e]ventually the trial judge will pull an arbitrary figure out of the air."[218]

IV. *MARGATE SHIPPING*—THE LITIGATION

The Justice Department and NASA trial attorneys agreed a $5 million settlement was appropriate.[219] First, however, the settlement had to be approved by the Associate Attorney General, Frank Hunger. He could not see past the first of the *Blackwall* factors, "[t]he labor expended by the salvors in rendering the salvage service."[220] "His review of the case shows that the CHERRY VALLEY had been delayed for

---

215. *Id.* at 104. For them "socially desirable" means "Kaldor-Hicks efficiency," that is optimizing the impact on gross domestic product. "A change is an improvement if those who gain evaluate their gains at a higher figure than the value which the losers set upon their losses." W. BAUMOL, ECONOMIC THEORY AND OPERATIONS ANALYSIS 378 (2d ed. 1965).

216. Landes & Posner, *supra* note 8, at 128.

217. *Id.*

218. GILMORE & BLACK, *supra* note 9, at 563.

219. STRONG & BRADEN, *supra* note 7, at 200.

220. The Blackwall, 77 U.S. (10 Wall.) 1, 13-14 (1870).

about two-and-a-half days and announces that a million dollars is more than adequate compensation."[221] Trial was unavoidable.

In July 1996, the trial was held before Judge Duval of the Eastern District of Louisiana. In his oral opinion announcing his decision, Judge Duval relied on the *Blackwall* factors:

> Judge Duval relied on the six traditional salvage factors first announced in *The Blackwall*.... He determined that the facts of the case pointed to the highest possible award under each of the factors, and chose what he considered to be a high percentage of a high salved value to reflect this circumstance. Judge Duval also considered the application of a seventh factor, the "salvors' skill and effort in preventing or minimizing damage to the environment," ... but ultimately concluded that it was not applicable to the case. He did consider the risk of environmental liability incurred by Cherry Valley under the rubric of the traditional factors, however.[222]

Judge Duval found that, "based on the entirety of the evidence, Margate was entitled to a salvage award equal to 12.5% of the value of the salved property, Poseidon and ET-70."[223] It should be noted that this is not an especially high proportion. In the 1975 edition of their treatise, Gilmore and Black acknowledged that the historical moiety was beyond a reasonable ceiling in modern times, but suggested a maximum of "about 20%."[224] Yet Judge Duval, like everyone else who met them or heard their story firsthand, was clearly impressed with Captain Strong, his chief mate Carl Gabriellson, and the other witnesses from the CHERRY VALLEY and the tug J.A. ORGERON.[225] Judge Duval noted that he would be prepared to adjust the percentage upward, should there be a dispute over his evaluation of the salvaged property.[226]

It remained for Judge Duval to determine the ET-70's value:

---

221. STRONG & BRADEN, *supra* note 7, at 200.

222. Margate Shipping Co. v. M/V J.A. Orgeron, 143 F.3d 976, 983, 1998 AMC 2383, 2389 (5th Cir. 1998) (citations omitted).

223. *Id.*

224. GILMORE & BLACK, *supra* note 9, at 563.

225. STRONG & BRADEN, *supra* note 7, at 226-27.

226. *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2390 ("He noted in the alternative that, even if the value of ET-70 were only $19 million as the United States claimed, the award would be the same as he would adjust the percentage accordingly."). The plaintiff's lawyers thought this statement was "the one possible soft spot" in Judge Duval's opinion should the government appeal. STRONG & BRADEN, *supra* note 7, at 232. So it proved to be. *See Margate Shipping*, 143 F.3d at 989-90, 1998 AMC at 2400 ("After determining that the salved value was $53 million, however, the court also noted that, even if the value were actually lower, as the United States argued, the dollar amount of the award would remain the same, as the court would adjust the percentage accordingly.... [W]e cannot approve this alternate holding.").

> With regard to ET-70, Judge Duval determined that it was specialized property without a market value, and therefore most appropriately appraised at its "replacement cost." This value, he found, was the production cost of ET-71, $51,387,000, because ET-71 was the likely "replacement" of ET-70. In making this finding, Judge Duval explicitly rejected the government's argument for a $19 million replacement cost based on the withdrawn 1992 option, calling it "much too speculative." He also rejected Margate's argument for a $92 million "cost-accounting" valuation.
>
> Combining this $51 million value for ET-70 with the $2 million stipulated value of Poseidon, Judge Duval declared a total award of $6,406,440 based on the 12.5% figure.[227]

The government challenged Judge Duval on three grounds: "First . . . that the court erred in its general application of the Blackwall factors. . .";[228] second, that it "clearly erred in its valuation of ET-70";[229] and third, that it "abused its discretion in picking such a high percentage and generally making such a large award in this case."[230]

On appeal to the Fifth Circuit, the key proved to be the ET-70's valuation. Although the burden of proving the cargo's value at trial is on the plaintiff salvor,[231] it is a factual decision within the trial court's discretion.[232] On appeal then, the burden on the government should be heavy. Judge Jolly acknowledged this with several quotes, such as, "[A]n award will be altered only if it was based upon incorrect principles of law or misapprehension of the facts or it is either so excessive or so inadequate as to indicate an abuse of discretion."[233]

---

227. *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2389-90.

228. *Id.* at 985, 1998 AMC at 2392.

229. *Id.*

230. *Id.*

231. THOMAS J. SCHOENBAUM, 2 ADMIRALTY & MARITIME LAW 172 (4th ed. 2004) ("The burden of proof of this value is upon the person claiming the award." (citing Nolan v. A.H. Basse Rederiaktieselskab, 267 F.2d 584 (3d Cir. 1959)).

232. *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2390; *see also* Allseas Maritime, S.A. v. M/V Mimosa, 812 F.2d 243, 246 (5th Cir. 1987) (noting that because of the fact-specific nature of the calculation of a salvage award, "the amount allowed is to be decided by the district court in its sound discretion").

233. *Margate Shipping*, 143 F.3d at 983-84, 1998 AMC at 2390 (quoting *Allseas Maritime*, 812 F.2d at 246; *see also* Hobart v. Drogan, 35 U.S. (10 Pet.) 108, 119 (1836) (Story, J.) ("This court is not in the habit of revising such decrees as to the amount of salvage, unless upon some clear and palpable mistake or gross over-allowance of the court below."); Oelwerke Teutonia v. Erlanger & Galniger, 248 U.S. 521, 524 (1919) (Holmes, J.) ("Unless there has been some violation of principle or clear mistake, appeals to this Court concerning the amount of the allowance are not encouraged."); 3A BENEDICT ON ADMIRALTY, *supra* note 120, § 311, at 24-2 ("An appellate court is, generally speaking, loath to change a salvage award.").

In their treatise, Gilmore and Black argue that there is little point in querying a trial court's evaluation of *The Blackwall* factors, as they "indicat[e]. . . that the variables are so many and so incapable of exact measurement that it will probably be fruitless for either party to take an appeal merely on the ground that the award was incorrectly computed."[234] Judge Jolly quoted this passage but continued: "As we shall see, we ultimately take a somewhat more sanguine view of the rationality of the factors as a legal rule."[235] He used the government's first challenge as a ground for a brief history of salvage law and to introduce Landes and Posner's economic analysis as "the underlying rationale of Justice Clifford's venerable factors"[236] and their adaptivity. Even before he reached that analysis, he anticipated it by introducing efficiency as the common law's criterion of adaptivity: "Court by court and case by case, the law of salvage has been steadily honed to ever greater levels of efficiency over the years, with the resultant rules serving as a convenient shorthand for the complex calculations of compiled experience."[237]

Landes and Posner's model drives Judge Jolly's thinking for the remainder of the opinion.[238] This made a great difference and shaped his use of the *Blackwall* factors. He adopted the Landes and Posner objective for the award, not Justice Clifford's two-part "reward given for perilous services, voluntarily rendered, and as an inducement to seamen and others to embark in such undertakings to save life and property."[239] In so doing, Judge Jolly emphasized that the aim of salvage law is "to create a post-hoc solution that will induce the parties to save the ship without first agreeing on terms."[240] The result of this simulated bargain is efficiency: "By definition, this 'efficient' fee is the one that would have been reached by the parties through voluntary negotiation in an open and competitive market, and its value will depend on a number of factual considerations."[241] That "number of factual considerations" may have

234. "The recitation of Justice Clifford's six 'ingredients' serves the useful purpose of indicating that the variables are so many and so incapable of exact measurement that it will probably be fruitless for either party to take an appeal merely on the ground that the award was incorrectly computed." GILMORE & BLACK, *supra* note 9, at 559.

235. *Margate Shipping*, 143 F.3d at 985 n.10, 1998 AMC at 2393 n.10.

236. *Id.* at 986, 1998 AMC at 2394.

237. *Id.*

238. "Fortunately, the principles underlying the *Blackwall* factors have not escaped the attention of our most prominent modern scholars." *Id.*

239. The Blackwall, 77 U.S. (10 Wall.) 1, 14 (1870).

240. *Margate Shipping*, 143 F.3d at 986, 1998 AMC at 2394 (citing Landes & Posner, *supra* note 8, at 100).

241. *Id.*, 1998 AMC at 2395 (citing Landes & Posner, *supra* note 8, at 100).

been summarized by Justice Clifford with an eye to their diversity, but from an economist's point of view they are greatly reduced:

> By far the most important of these considerations, however, will be the cost to potential salvors of performing the service and the benefit to the salvee of it being performed; obviously, no voluntary salvor would be willing to perform a salvage for less than it would cost him to do it, just as no salvee would agree to pay more for a salvage than the loss he could thereby avoid.[242]

Homo economicus sets off costs and benefits and refuses to act unless the benefits outweigh the costs; "salvage awards are not based on the altruistic principle of good samaritanism—that virtue is its own inducement and its own reward."[243] "Should the gap between cost and benefit prove illusory, as when the costs of the service outweigh the benefits to be derived, then no agreement will be possible, and the parties must go their separate ways."[244]

"[O]bviously, no voluntary salvor would be willing to perform a salvage for less than it would cost him to do it."[245] It certainly is not obvious to me, and it would not have been obvious to Captain Strong on November 14-15, 1994. I would wager that it would not be any more obvious to him, as a mariner, to this day. "[J]ust as no salvee would agree to pay more for a salvage than the loss he could thereby avoid."[246] Somehow Judge Jolly seems to have lost sight of the human lives involved, perhaps because they have no place in the hypothetical salvage contract. Neither price nor reward is placed on them. As noted above, although only on the basis of armchair empiricism, it is probable that most rescues on the water cost the rescuer more than his/her reward ($0).[247] Justice Clifford may not have provided a veneer of rational determinacy; however, he did more accurately summarize what may be going on in the minds of a prospective rescuer and a person in distress.

After a recitation of the *Blackwall* factors,[248] Judge Jolly returned to the same economic reduction:

> To paraphrase and distill its many distinguished commentators, the very object of the law of salvage is to provide an economic inducement to seamen and others to save property for the good of society by bestowing a fitting reward for their services in the courts of justice. It is profit, not

242. *Id.* (footnotes omitted) (citing Landes & Posner, *supra* note 8, at 100).
243. *Id.* at 987, 1998 AMC at 2396.
244. *Id.* at 986-87, 1998 AMC at 2395.
245. *Id.*
246. *Id.*
247. *Id.*
248. *Id.* at 987, 1998 AMC at 2395-96.

> principle, that is the driving force behind the law of salvage, and the question for the court is simply what amount of profit is fitting in the case before it.[249]

The only factor to impress, other than the cost of the rescue to the salvor and the value of the property to the salvee, is the risk of loss of the salved goods.[250] In this case, it doesn't enter the calculation because "the risk is essentially conceded to have been a 100 percent chance of total loss, [and therefore] the value of the salved property obviously takes on added significance in measuring benefit."[251] The overwhelming influence of the buyer's/victim's/rescuee's side of the hypothetical ex ante bargain will dominate the appellate court's decision. "To those who would generally emphasize the cost factors over benefit, we can only respond that no seller truly operates on the principle of selling at cost; a seller is induced to provide his goods or services by the opportunity for profit."[252]

Consider what we know of those actually in the hypothetical bargainers' position in the CHERRY VALLEY rescue, Captain Strong of the CHERRY VALLEY on the seller's side and Captain Wiles of the tug J.A. ORGERON on the buyer's side.[253] Captain Wiles knew of his cargo's value; Captain Strong learned of it only after the rescue had been successfully completed and all were relatively safe.[254] Captain Wiles knew that without the CHERRY VALLEY, he and his crew, as well as his tug, tow, and cargo, were most likely doomed; he wasn't thinking of bargaining.[255] Could he, even in a plausible hypothetical, bargain on the basis of the ET-70's value? And Captain Strong: Was he thinking of that

---

249. *Id.*, 1998 AMC at 2396.

250. Even Landes & Posner might have accorded the other factors greater consideration than did Judge Jolly. For example:

> Our competitive rescue model requires that the greater the danger is, and hence the lower the probability of a successful rescue, the greater must be the aggregate compensation to the rescuer, holding constant the level of rescue inputs, assuming that the compensation is paid only if the rescue attempt succeeds. Thus, to make the rescuer's compensation a positive function of the degree of danger is consistent with efficiency considerations.

Landes & Posner, *supra* note 8, at 103. Judge Jolly may have missed this. Suppose the rescue had failed, and worse, the CHERRY VALLEY had foundered on the shoal, spreading oil along Vero Beach. The CHERRY VALLEY owners would then have lost their financial shirts in the clean-up. Such a risk in Landes & Posner's thinking should be taken into account.

251. *Margate Shipping*, 143 F.3d at 988 n.15, 1998 AMC at 2397 n.15.

252. *Id.* at 988 n.16, 1998 AMC at 2397 n.16.

253. The master has the authority to bind the owners and the owners of the cargo. Am. Metal Co. v. M/V Belleville, 284 F. Supp. 1002, 1970 AMC 633 (S.D.N.Y. 1968) (noting that the master became "agent by necessity"); GILMORE & BLACK, *supra* note 9, at 579-80.

254. *See supra* text accompanying notes 71-73.

255. *See supra* text accompanying note 80.

cargo's value? Obviously not; he did not know what the cargo was. Was he thinking of the salvage cost? He did spare a thought for the risks to his ship, to his future, and to the environment should anything go awry, but his decision was based on the mariners' unshakeable code of reciprocal altruism.[256]

All of the government's points of appeal were side issues readily disposed of, except the ET-70's value. If Judge Duval made a mistake, it was in elaborating upon his mode of calculating damages.[257] Had he enumerated the *Blackwall* factors, commenting on the application of each according to the facts adduced at trial and concluded, "In the light of these factors I award plaintiffs $6,406,440," his judgment might have stood inviolate. But he did give us an analysis which included his determination of the cargo's value as "the production cost of ET-71, $51,387,000, because ET-71 was the likely 'replacement' of ET-70."[258] This gave Judge Jolly the opportunity to find clear error on appeal.

> The purpose of establishing the value of the salved property is to ascertain what benefit the salvage service conferred on the salvee; . . . . In this case, that price would simply be the amount that NASA would actually have had to pay Martin Marietta for them to make a new ET-70.[259]

And this he determined to be not the price of the ET-71, which would have actually replaced the ET-70, but the price of an additional external fuel cell produced at the end of the contract; that is, the withdrawn option price for an additional unit, $19 million.[260]

> On this point, the evidence was absolutely undisputed that NASA could have purchased an additional tank for approximately $19 million in out of pocket expense at the time of the salvage. Martin Marietta had made a binding offer to produce up to four additional tanks for this price, and although the offer had been recently withdrawn, there was no evidence to suggest that it no longer accurately reflected what Martin Marietta would charge. True, the district court held that the "option" was too "speculative" to be relied on. This finding, however, was completely at odds with the record. In the light of all the evidence, we are convinced that it was in clear error.[261]

---

256. "I know with certainty that if we snap a line or the ship goes aground and one of my crew gets hurt or we put oil in the water, my career is over. But, politics aside, I'd be unable to live with myself if I sailed by without at least trying to help." *See supra* text accompanying note 50.

257. *Margate Shipping*, 143 F.3d at 983, 1998 AMC at 2389-90.

258. *Id.*

259. *Id.* at 990-91, 1998 AMC at 2401-02..

260. *Id.*, 1998 AMC at 2402.

261. *Id.*

But it was more complicated than simply reducing the award by 12.5% of $24 million. Taking into account the cost of tying up the government's money,[262] and adding the barge POSEIDON's value, [a]pplying the district court's 12.5% salvage percentage, ... we are left with a new salvage award of $4.125 million."[263]

V. CONCLUSION

> "When we started out on this adventure, we did so because five guys on a tug were having a very bad night in a tropical storm," Captain Strong replies, a little quietly at first. We didn't do it for money. We did it because we were the only ones around who could render assistance, and we went in to see what we could do. We were very lucky and were able to keep the men safe and save the tug and barge.[264]

Whatever it may do for the cause of economic rationality, at least as seen from armchairs high and dry in Chicago or New Orleans, Landes and Posner's economic model of salvage does not fit the real world in which maritime rescues take place. In the same spirit of armchair empiricism, we should acknowledge that numerically, most rescues are of small craft and no salvage is thought of by either the rescuer or the rescued. In the CHERRY VALLEY's rescue of the tug J.A. ORGERON, its tow, the barge POSEIDON, and its cargo, the external fuel cell ET-70, we have an example of the opposite end of the spectrum: a dangerous and highly skillful rescue of a rescuee in dire straits, putting at risk not only the rescue vessel, but also its cargo of oil and a pristine, treasured coastline. The motivations of Landes and Posner's *homo economicus* as a hypothetical ex ante bargain are completely incongruent with those of the mariners involved, Captains Skip Strong of the CHERRY VALLEY and Lanny Wiles of the J.A. ORGERON and their respective crews.

Imagine Captain Strong's saying, "Lanny, in my calculation of the risks here, $6 million won't do. And don't forget, Lanny, it's you and

---

262.

> Although the government is sometimes wont to think otherwise, money is now well known to have a time value.... The three-year treasury bill rate on November 15, 1994, was 7.41%, and we are confident that the cost to the United States of immobilizing $50 million over the three years in question was approximately (1.07413 - 1) x $50 million = $12 million. Whatever risks and costs NASA would have incurred by having three tanks in circulation instead of four, NASA itself determined that these risks were worth about $12 million to avoid. By rescuing ET-70, Captain Strong saved NASA from this $12 million in additional risks and costs as well, and it must be counted towards a proper valuation of the tank.

Id. at 992, 1998 AMC at 2404 (footnote and citation omitted).

263. *Id.* at 993, 1998 AMC at 2405.

264. STRONG & BRADEN, *supra* note 7, prologue, at xiii.

your crew who are about to die; we are just uncomfortable, but no worse than in many another storm." Although such might be the position of Captain Economicus, it is utterly foreign to mariners. Lives are not at stake in the hypothetical bargain, only market values. Of those, in Judge Jolly's view, the salved goods' value predominates. Recall what Emeritus Professor Reed of the Maine Maritime Academy said was at stake for Captain Strong, had anything gone awry:

> He would have destroyed a multi-ship U.S. company. He would have destroyed the shareholders. He would have gravely tarnished his ability to sail on his license. He would have found himself joining that small group of eco-demons in the world.... How could you put the vessel into that circumstance," Reed asks rhetorically, "where you thought you had ten feet under the keel? But heroes come out of such circumstances—where you put yourself against such odds. Those men on the tug could have died that night.[265]

The maritime community is one in which reciprocal altruism goes unquestioned. As Captain Strong wrote, having heard the word "salvage" mentioned for the first time by his home office's legal counsel well after the rescue was a success and all parties were comparatively safe: "No. That [salvage and Lloyd's Open Form] never entered my mind. All we were trying to do was help the five guys on the tug .... I certainly wasn't thinking about salvage rights; I just wanted to help them."[266] Of Captain Lanny Wiles he wrote: "A seaman like Wiles had a near religious respect for one of the sea's accepted codes: a quid quo pro that obligated the offering of aid, if at all possible. It is a brotherhood of people at sea."[267]

Did the two Captains "negotiate" in the hours prior to the actual rescue attempts? Certainly not.

> We [Captains Strong and Wiles] don't talk much about the barge, other than for him to describe the fact that it is relatively light and has a lot of sail area, which is why he is drifting at such a rapid rate toward the coast of Florida. Our first priority is keeping the crew safe. We'll worry about the barge after that, but Lanny will do everything he can to save the barge and its cargo, too.[268]

Landes and Posner treat rescue and its price, salvage, as a service in a market for services just like any other. But it is not like any other market. And the participants are not at all like those posited by Landes and

265. Murphy, *supra* note 14, at 32.
266. *Id.* at 140.
267. *Id.* at 80.
268. *Id.* at 105.

Posner or, in their wake, by Judge Jolly. Their culture and their motivations are dominated by the spirit of reciprocal altruism. For them it would be unthinkable to do otherwise. In *The Blackwall*, Justice Clifford may have produced a messy and under-determinate list of factors, but in so doing he gave trial court judges the opportunity to take into account motivations, risks, and values. The difference in attitude shown by trial Judge Duval and appellate Judge Jolly reflects the difference between the abstract, otherworldly calculus of law and economics, and the real world mariner community.

Our historically developed salvage law has adapted to better reflect the mariner community's values and ethos. The Landes and Posner economic analysis illustrates only *homo economicus*'s impoverished spirit. What human being has such values and motivation? If *homo economicus* models anybody, it certainly does *not* model those who venture to sea in ships.

But if not solely as a motivation to the potential salvor—and we have seen that this is highly implausible in the real world of maritime rescue—why salvage? Well, why *not* as a reward?[269] It is not like a voluntary reward for returning found goods. On land it is very likely that if one chooses not to rescue found goods, then another would. At sea in a rescue situation, there is unlikely to be another chance. Absent a salvor, the property—ship and cargo owned by absentees safely ashore—will be lost. The fellowship of mariners is not the fellowship of property owners; why should their reciprocal altruism extend beyond their fellows' lives? Felt responsibility to their profession is one reason: it is what you do, so do it as best you can. Perhaps this would be unknown to *homo economicus*, but it is known to humans. But for the salvor's action, the owner, or in reality the owner's insurer, would face a much greater loss/payment. A reward to the volunteer is, in such circumstances, equally human, even for an insurer.

The salvor's preservation of the property is rather like a gift to its owner or insurer, is it not? The recipient is put under an obligation at least as great as, if not greater than, a contractual obligation.[270] It would not be the same ashore, because the condition "but for this salvor's action" would not hold. We should not be surprised that the law should recognize and enforce this obligation, especially when it is a law that has been passed down to us through history, from times less determinedly selfish than our own.

---

269. The Blackwall, 77 U.S. (10 Wall.) 1, 14 (1870).

270. MARCEL MAUSS, THE GIFT (1925); E.A. BAERENDS, THE ONE-LEGGED CHICKEN (1988).